

**Notice of Allowability**

Application No.

10/007,992

Applicant(s)

DYBDAL ET AL.

Examiner

Matthew C. Sams

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/19/2007.
2. ☒ The allowed claim(s) is/are 2-8, 10-14, 16-19 and 31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter L. Holmes (Reg. 37,353) on 12/27/2007.

The application has been amended as follows:

16. (currently amended) A method of determining communication link quality employing beacon signals, the method comprising the steps of:

equipping a plurality of communications satellites with beacon transmitters that generate beacon signals including a continuous wave (CW) tone and a coded signal that are different for each of the communications satellites;

providing a communications device, that is capable of establishing UHF communications links with the communications satellites by means of a first antenna, with means for receiving and processing the beacon signals to determine the quality of the UHF communications links;

providing the communications device with means for communicating to a user information pertaining to the quality of the UHF communications links and identifying individual component impairments of a total link degradation; and

providing the communications device with a means for adjusting a transmission power of the communications device;

wherein the means for adjusting transmission power comprises a booster device that includes an alternative high gain antenna.

***Allowable Subject Matter***

2. Claims 2-8, 10-14, 16-19 and 31 are allowed.

***Examiner's Statement of Reasons for Allowance***

3. Applicant's invention is drawn to a method of determining communication link qualities in the UHF band for satellite communication employing beacon signals, comprising:

- Equipping a plurality of communications satellites with beacon transmitters that generate a continuous wave tone and a coded signal, which are different for each of the communications satellites.
- Providing a communications device, capable of communicating with the communications satellites over the UHF band over a first antenna, with means for receiving and processing the beacon signals to determine the quality of the UHF communications links.
- Providing the communications device with a means to communicate information to a user regarding the quality of the UHF communications links and identifying the individual components that are impairing the communication signal.

- Providing the communications device with a means to adjust the transmission power of the communications device with a booster device that includes an alternative high gain antenna.

4. Applicant's independent claim 16 recites, *inter alia*, a method of determining communication link quality employing beacon signals, the method comprising the steps of equipping a plurality of communications satellites with beacon transmitters that generate beacon signals including a continuous wave (CW) tone and a coded signal that are different for each of the communications satellites, providing a communications device, that is capable of establishing UHF communications links with the communications satellites, with means for receiving and processing the beacon signals to determine the quality of the UHF communications links, providing the communications device with means for communicating to a user information pertaining to the quality of the UHF communications links and identifying individual component impairments of a total link degradation and providing the communications device with a means for adjusting a transmission power of the communications device wherein the means for adjusting the transmission power comprises a booster device that includes an alternative high gain antenna. Applicant's independent claim disclose a particular combination that is neither suggested nor taught in the prior art.

5. The cited prior art, Sherman et al. (US-6,021,309) in view of Ibanez-Meier et al. (US-5,946,603) teaches a method of determining communication link quality determining utilizing beacon signals and responding to a blockage environment in the UHF band including identifying individual components impairing communications, but

differs from the claimed invention by not reciting a second high gain antenna for adjusting transmission power with a booster device.

6. Accordingly, Applicant's claims are allowed for these reasons and for the reasons recited by the Applicant in the Amendments filed on 5/6/2005, 10/7/2005, 11/28/2005, 7/8/2006, 5/30/2007 and 11/19/2007.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

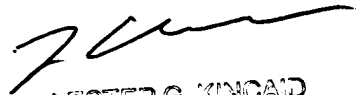
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS  
12/27/2007

  
LESTER G. KINCAID  
SUPERVISORY PRIMARY EXAMINER